REMARKS

Claims 12-30 are pending in this application. Claims 12 and 18-25 stand rejected under 35 U.S.C. §102(e) as being anticipated by Sandhu et al. (U.S. Patent No. 6,086,442) ("Sandhu"). This rejection is respectfully traversed.

The claimed invention relates to a field emission display device. As such, independent claim 12 recites a "field emission display device" comprising *inter alia* "at least one current emitter formed of a doped silicon" and "a substrate having a phosphor coating in at least one region positioned to receive electrons emitted by said current emitter." Independent claim 12 also recites that the current emitter comprises "a treated current emission surface having a reduced atomic concentration of oxygen resulting from treatment of the current emission surface with a plasma enhanced chemical vapor deposition hydrogenation process followed by a nitrogen infusion process."

Independent claim 24 recites a "field emission display device comprising" *inter alia* "at least one current emitter formed of a doped silicon" and "a substrate having a phosphor coating on at least a portion of the substrate, said coating positioned to receive electrons emitted by the current emitter." Independent claim 24 also recites that the current emitter comprises "a plasma enhanced chemical vapor deposition hydrogenation process-treated and subsequently nitrogen infusion process-treated current emission surface having a reduced concentration of native oxides."

Sandhu relates to methods of forming field emission devices. According to Sandhu, "a method of forming a field emission device includes forming an electron emission substrate comprising emitters and an electrically conductive extraction grid formed outwardly of the emitters." (Abstract). Sandhu also teaches that "[a]n electrically conductive layer is substantially selectively deposited over the grid and emitters relative to the insulative mass"

and that "[a]fter the depositing, the electron emission substrate is joined with an electron collector substrate." (Abstract).

Sandhu fails to disclose all limitations of independent claims 12 and 24. Sandhu fails to teach or suggest "a treated current emission surface having a reduced atomic concentration of oxygen resulting from treatment of the current emission surface with a plasma enhanced chemical vapor deposition *hydrogenation* process followed by a nitrogen infusion process," as independent claim 12 recites (emphasis added). Sandhu also fails to teach or suggest a current emitter comprising "a plasma enhanced chemical vapor deposition *hydrogenation* process-treated and subsequently nitrogen infusion process-treated current emission surface having a reduced concentration of native oxides," as independent claim 24 recites (emphasis added). Sandhu teaches that plasma enhanced chemical vapor deposition is employed for the actual formation of an electrically conductive layer 56, and not for the treatment of a current emission surface after its formation, as in the claimed invention. In fact, the plasma enhanced chemical vapor deposition *hydrogenation* process of the claimed invention employs a silane gas and not "a plasma from source gases comprising a metal tetrahalide (i.e., $TiCl_4$) and H_2," as in Sandhu. For at least these reasons, Sandhu fails to teach or suggest all limitations of independent claims 12 and 24, and withdrawal of the rejection of these claims is respectfully requested.

Claims 13-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sandhu in view of Kanicki. This rejection is respectfully traversed.

Applicant reaffirms that the asserted combination of references is improper under the provisions of 35 U.S.C. § 103(c). Since the subject matter disclosed in Sandhu (which qualifies as prior art only under § 102(e)) and the subject matter of the claimed invention were commonly owned at the time the invention was made, the Sandhu reference is not to be considered in a determination of patentability under § 103. Accordingly, withdrawal of the rejection of claims 13-17 is also respectfully requested.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

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